International Forum on

The Use of Cloud Computing Technology to improve Education in Arab countries,

Tunis, Tunisia, 05-06 October 2016.

Draft Concept Note

Introduction:

Ten years ago, Amazon unleashed a technology that sparked a revolution in IT. What became called "cloud computing" turned out to be a paradigm shift in the way we use computers. Today, the cloud is transforming Industry and impacting education and research more than any other technology has ever did.

Indeed, educational and research institutions all over the globe are becoming highly dependent on IT services whether to manage their business requirements or to enhance education, where BYOD/BYOT (Bring Your Own Device/Bring Your Own Technology) plays a critical role. These institutions are looking at adopting cloud computing technologies and embedding them as core capabilities of their teaching/learning frameworks, in order to advance educational opportunities for their students further.

National and international funding bodies elaborated strategies and work programs to support projects aiming at fostering the use of the cloud in research and education. After years of building capacities and e-Infrastructures fully relying on Grid technologies, both the European Commission and the American National Science Foundation (NSF) kick started a slow but steady shift towards making the cloud the corner stone of their national or trans-national federated research infrastructures.

Mindful of the emerging benefits and challenges of cloud computing technology in education and research, The Arab Educational, Cultural, and Scientific Organization (ALECSO) and The International Telecommunications Union (ITU Arab Regional Office) have been collaborating since 2014 to conduct jointly a cloud computing project in the Arab region with the aim to promote this technology in Arab countries especially for educational and research sectors.

Within this context, ALECSO, jointly with ITU Arab regional office, prepared a dedicated study entitled "Guidelines to improve the use of Cloud Computing Technology in Education in Arab Countries". These guidelines aim to provide to a wide range of stakeholders in the education field (decision makers, teachers, researchers, students, and IT managers) suitable strategies and action plans for the effective use and implementation of cloud computing based infrastructure, platforms, and services for education and research at different levels.

The general objectives of the ALECSO-ITU cloud computing study are as follows:

- Raising awareness about cloud computing technology and related benefits and advantages especially for the education field;
- Developing specific guidelines for migrating to the cloud which take into account several parameters and national contexts for the Arab countries;
- Delivering a cloud migration policy for decision makers;
- Defining a roadmap to develop and deploy cloud infrastructures and platforms for education and research.

The report (an advanced draft is available online at : …..) is structured as follows:

- The first chapter deals with the state of the art of cloud adoption and cloud technologies; It explains the concepts, introduces some initiatives and surveys focusing on cloud computing in education and research and sketches technical elements of the cloud ecosystem in order to characterize the main tools used in production around the world;
- Chapter 2 classifies the Arab countries according to their level of development in the ICT field; It also presents the methodology adopted to conduct a survey on cloud computing in the Arab countries as well as the survey's results;
- Chapter 3 outlines the policy recommendations taking into account the findings related to current state of cloud adoption worldwide, particularly in educational and research as well as the outcome of the survey and the state of ICT in the Arab world;
- Chapter 4 provides a practical guide to help educational institutions and information technology (IT) managers plan and operate application and workload migration to the cloud. It provides a detailed roadmap that covers a list of technical steps for migration.

To shed the light on the outcomes of the study, providing the primarily milestones towards achieving a cloud migration plan for Arab educational and research institutions, ALECSO and ITU are organizing an international conference on "The Use of Cloud Computing Technology to improve Education in Arab countries" in Tunis, Tunisia, 05-06 October 2016.

With this conference, organizers intend to feature opportunities of cloud computing technologies for academicians, researchers, Decision makers, students, and IT managers looking for a cloud computing migration plan or simply using this technology at an individual or collective scale or to build their career in this area.

The International conference on "The Use of Cloud Computing Technology to improve Education in Arab countries", sponsored by ………………………………………………… is embracing several valuable speeches. Indeed, talks from world-class academic and industry experts will include keynotes, case-studies, worldwide experiences, etc. focusing on both business and technical aspects of cloud computing.

Overall Goal:

The ALECSO-ITU International conference aims to discuss the cloud computing technology benefits and challenges for Arab Educational an research institutions and to present the jointly prepared guidelines on policies for the effective development and deployment of cloud computing based solution for alike intuitions, taking into account their current ICT status, context, and many other relevant parameters.

Conference sessions:

The conference agenda will embrace different sessions related to cloud computing technology, including:

– ALECSO-ITU Cloud Computing Guidelines
– Policies and strategies of Cloud Computing in Education
– International Experiences on using Cloud Computing Technology in Education
– Cloud Computing enhanced Education: Solutions from Industry
– Cloud Computing use cases
– Cloud migration: Implementation and guidelines

Beneficiaries:

All stakeholders in relation to the ICT, education, and research fields, including Academicians, Decision Makers, Teachers, Researchers, Students, IT Managers, Industrials, etc.